DETAILED ACTION

Election/Restrictions

1.   Applicant's election of Group I (claims 1-14, 16-36, 49, 50, 53 and 54) in the reply

filed on 12/14/2007 is acknowledged. Because applicant did not distinctly and

specifically point out the supposed errors in the restriction requirement, the election has

been treated as an election without traverse (MPEP § 818.03(a)).

Response to Arguments

2.   Applicant's arguments, see page 21, filed 12/14/2007, with respect to the

drawing objections have been fully considered and are persuasive. The objections of

the drawings have been withdrawn.

3.   Applicant's arguments, see page 21, filed 12/14/2007, with respect to the

specification objections have been fully considered and are persuasive. The objection

of the specification has been withdrawn.

4.   Applicant's arguments, see page 21, filed 12/14/2007, with respect to the claim

objections have been fully considered and are persuasive. The objections of the claims

have been withdrawn.

5.   Applicant's arguments, see page 21, filed 12/14/2007, with respect to the 101

rejections have been fully considered and are persuasive. The 101 rejections of claims

26-31 have been withdrawn.

6.   Applicant's arguments, see page 22, filed 12/14/2007, with respect to the 112 2nd

paragraph rejections have been fully considered and are persuasive. The 112 2nd

paragraph rejections of claims 26-31 have been withdrawn.

7.   Applicant's arguments, see pages 22-30, filed 12/14/2007, with respect to the

rejection(s) of claim(s) 1-8, 10, 11, 13, 14, 16-18, 20-36, 49, 50, 53 and 54 under 102(e)

have been fully considered and are persuasive. Therefore, the rejection has been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made

in view of Wiebe '089.

        In the response to the action mailed 9/18/2007, the Applicant proposed a

plethora of questions to be answered. The Examiner would like to briefly address some

of the points raised. The first point is regarding the overall premise of the independent

nature of the pattern information from the print instructions containing the content. The

Examiner noted that the argument of having these two claimed functions independent

from one another were in regards to only claims 1, 14, 22. The rest of the independent

claims do not mention the separation or independent nature of the pattern information

and the print instructions.

        Another point raised is regarding the Silverbrook reference disclosing the feature

of receiving print instructions. The Applicant proposed that the Examiner's assertion

was merely an assumption not backed up by any presented evidence. Then the

Applicant raised an interesting point by pointing out two critical sections in Silverbrook,

col. 5, ln 25 and col. 14 ln 18-24. Here the Applicant summarized the second citation as

"*the printer rasterizes the page descriptions and expands and prints the page images*".

Before mentioning these citations, the Applicant proposed that "*the netpage printer could receive bitmaps or other pixel data*". This point is interesting since a raster image is also known as a bitmap and the point of rasterization is to transform information such as pdl, or a page description language, into a raster image. The Applicant quoted that the printer rasterizes the page descriptions. Based on the Applicant's bitmap and pixel statement, does the applicant mean that the printer turns information already into a bitmap into another bitmap? Regardless of the point raised, the Examiner would like to point out that Silverbrook does indeed transmit print instructions to a printer and this is shown in col. 28, ln 26 - col. 29, ln 40. This citation shows the language in which the document layout is represented and once this information is sent to a printer, this information is accepted, rasterized and printed. The point of rasterization in this aspect of the invention is again to take print instructions to produce a raster image or bitmap and to output this information. One of ordinary skill in the art would know that the basic rasterization technique, when viewing the above citation, would be to have a printer accept a printer description language, produce a bitmap image from the instructions from the descriptions of the page and output this image by the printer. The page description being sent to the printer is used to instruct the printer in creating a bitmap in accordance to the objects described. The page description is considered as the print instructions since it instructs the printer what to print once it is received.

Also regarding the same citation mentioned above, is explained the difference between the image and graphics use and placement on an overall document. The

layout of a document contains several objects that are summarized in Table 3 (see col. 28) and this same layout information is sent to a netpage printer.

Another interesting point the Applicant raises is the question regarding "coded data information". According to the Applicant, coded data information is "*another undefined term brandished by the Examiner but not to be found anywhere in the actual Silverbrook reference*". However, once the Examiner read the cited portions of the office action sent on 9/18/2007 on pages 8 and 9, the Examiner noticed cited portions that clearly disclosed this unexplained term of "coded data information". Contrary to the arguments of the Applicant, in column 2, lines 1-30, the Silverbrook reference discloses the term "coded data".

Regarding claim 26, the Examiner would like to point out that the Examiner has seen the argument regarding the page description and would like to simply state that the page description is the print instructions. The description consists of both the actual content to be seen when printed on the sheet that may consist of text, images and graphics and the description also contains the invisible information of the coded data. Unlike claim 1, claim 26 does not make a distinction of the pattern information being separate or independent from the content information. Therefore, the Silverbrook reference still reads on the features of this claim and other claims that do not make the pattern information and content information independent.

Lastly, regarding claim 33, the Applicant asserted that the Examiner's point of having "different sets of coded data, or tags" is incorrect and that the system can have the different print data, but must have the same tag makeup. When looking at

Silverbrook column 7, lines 25-67 and column 8, lines 1-55 (cited in the action), the

Examiner saw an example listed as stating that the netpages that are printed can have

different tag data content. For example, if a user prints 2 pages with the same page

description, how does the system determine what page the netpage pen is interacting

with? When looking at the first cited portion in column 7, the page ID, which is

synonymous with the region ID encoded in the tag, is different for each page. This is

one example of the netpage tags being different. The netpage tags can be different in

arrangement as well. In column 8, the reference states that the preferred embodiment

is for the tags to coincide with an entire page. However, there is another manner in

which the tags can be placed. The other manner is within a zone of an interactive

element (i.e. text field or button shown in figure 1). This is an example of two tag

arrangements that are available on the Silverbrook system that can be generated.

Therefore, with some of the above explanations and the combination of the

reference of Wiebe '089, the Examiner believes that the claimed features are disclosed.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9.   Claims 35 and 36 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. The claim is directed to a

seemingly patentable apparatus that comprises a computer program that resides on a

host computer. However, a computer program does not fall within one of the four

statutory categories. It is suggested that the Applicant use the suggestions used for claim 26 to overcome the rejection. Suggested language is "... comprises a computer program encoded on a computer readable medium ...". The dependent claim is also rejected since it depends on a rejected claim.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "*indicate the location of at least one position identification marking in the document without indicating the appearance of the marking at each location*" renders the claim indefinite. The Examiner needs more clarification of what exactly does this term mean. Does it mean that the location of the pattern position is indicated without the actual pattern appearance being indicated or without the image data appearance on the pattern information being indicated?

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13.   Claims 26-28, 30-36, 49, 50, 53 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook '573 (USP 6987573).

Re claim 26: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses a computer readable medium encoding instruction to cause a computer to receive a file defining a document to be printed and to produce a set of print instructions (i.e. in the system, the printer receives a file from the netpage server that defines the document to be printed using the page description and the page description is considered as the set of printing instructions for the printer to print the corresponding netpage for the page description; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43) which comprise

instructions that define the content of the document to be printed (i.e. using page description, the visible content of a document is defined by the server application's file sent to the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43) and

at least one pattern instruction which when interpreted by a printer causes the printer to provide a position indication marking pattern on the printed document (i.e. the server also has an application to produce instructions that characterize the page and

document instance that is represented by coded data included in the printed document through tags. Once the printer receives the instance of the netpage document, the printer prints out coded data elements, represented by tags, based on the instructions, or page description, received. The instructions could include a tag in a subregion or a plurality of tags on the whole of the document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 27: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses the computer readable medium of claim 26 in which the print instructions include at least one pattern instruction that comprises a pattern ID (i.e. when a computer system, or server, sends a request for a document to be printed on the netpage printer, the page description that consists of both graphic image data and coded data is sent to the printer. The coded data sent to the printer comprises a page ID location within the actual document. This page ID location tag is used to tell the printer to print the tag content in that specific region or location. This tag can appear either on the whole surface of the page or on a subregion of the page. If the tag appears on a subregion on a page, the printer adds the coded data on that portion of the document and this performs the feature of adding a portion of pattern identified by the ID, since this is identified by the tag with a page ID position; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43).

Re claim 28: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses the computer readable medium of claim 26 in which the

pattern instruction comprises a network address of a processor which can supply

pattern to the printer (i.e. when the printer needs to resolve a page instance within a

netpage, the printer uses the DNS method to connect with the server in order for the

server to supply the respective page ID tag to the printer; see figs. 1-4; see col. 1, lines

55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8,

lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 30: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses the computer readable medium of claim 26 which comprises

a printer driver or a filter which receives a file containing program instructions defining a

document from a document processing application and passes the instructions to a

printer driver after having added the pattern instructions to the file (i.e. the printer has a

processor and a RIP. The processor is used to receive a file containing program

instructions defining a document from a server, considered as a document processing

application. The processor is considered as a printer driver since it drives the functions

of the printer. The server used in the invention transmits the instructions, or page

description, of a document to print after the document and pages instances, or tags, are

added to the overall document information; col. 47, lines 1-67 and col. 48, lines 1-22).

Re claim 31: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses the computer readable medium of claim 26 which is adapted to generate a set of different patterns or portions of pattern (i.e. in order to distinguish the different netpages from one another, a different set of coded data must be developed for a large number of documents. The coded data can be on the whole of a document, or on a subregion of a document, which is analogous to patterns or portions of pattern; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43) and

to produce a set of different copies of an original document (i.e. the user is able to change the physical layout of the visible data as well. The different copies can be different from one user to another or different from one layout to another; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43) by combining the content with one of the set of different patterns (i.e. in order to distinguish different users who may choose to have the same visible layout, the system gives these layouts different coded data, or tags. The different coded data, or tags, are arranged differently for each netpage; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 32: Silverbrook '573 discloses an interface surface printer comprising:

receiving a set of print instructions defining the content of a document (i.e. in the system of Silverbrook '573, a netpage printer is able to receive a page description, or print instructions, describing the content of a document. The content in Silverbrook '573 refers to the physical graphics and images that can be seen on the sheet when printed. This printed page is referred to as a netpage; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67 and col. 8, lines 1-35);

generating a set of different patterns of position identification markings (i.e. in the system, different sets of coded data, or tags, can be developed in the system. These tags represent the portion of the image where they are located. Since the tags can be on a subregion or on the whole of the document, the feature of different patterns of position identification markings is performed; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43); and

printing a plurality of copies of the document in which each printed copy comprises both the content and one of the patterns of the set (i.e. in order to distinguish different users who may choose to have the same visible layout, the system gives these layouts different coded data, or tags. The different coded data, or tags, are arranged differently for each netpage. The system is able to allow printing of a plurality of copies of a document with different sets of coded data, or tags, embedded within them; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 33: Silverbrook '573 discloses an interface surface printer comprising:

receiving means for receiving a set of print instructions defining the content of the source document (i.e. in the system of Silverbrook '573, a netpage printer is able to receive a page description, or print instructions, describing the content of a document. The content in Silverbrook '573 refers to the physical graphics and images that can be seen on the sheet when printed. This printed page is referred to as a netpage; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67 and col. 8, lines 1-35);

processing means for generating a set of different patterns or portions of pattern (i.e. in the system, different sets of coded data, or tags, can be developed in the system. These tags represent the portion of the image that they are located. Since the tags can be on a subregion or on the whole of the document, the feature of different patterns of position identification markings is performed; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43); and

printing means for printing a plurality of copies of the source document in which each printed copy comprises both the content of the source document and one of the patterns of the set (i.e. in order to distinguish different users who may choose to have the same visible layout, the system gives these layouts different coded data, or tags. The different coded data, or tags, are arranged differently for each netpage. The system is able to allow printing of a plurality of copies of a document with different sets of coded data, or tags, embedded within them; see figs. 1-4; see col. 1, lines 55-67, col.

2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 34: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses the apparatus of claim 33 which comprises a printer in which the processing means for adding pattern resides at the printer (i.e. at the printer, there can be a storage medium that stores the layout information of the coded data, or tags, that are analogous to the pattern. The processor and RIP on the printer are both utilized to add the coded data to the document data in the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 35: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses apparatus according to claim 33 in which the processing means for adding pattern comprises a computer program which resides on a host computer connected to the printing means (i.e. on the server, considered as a host computer, is a program that is capable of adding coded data to the netpage data in order for the coded data to be added to the netpage when the document is sent to the printer the server is connected to for printing; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 36: The teachings of Silverbrook '573 are disclosed above.

Silverbrook '573 discloses apparatus according to claim 35 in which the computer

program comprises a printer driver (i.e. the software used by both the printer and the

server is used to drive the functions of the netpage printer to produce a netpage and

both are considered to be printer drivers; see figs. 1-4; see col. 1, lines 55-67, col. 2,

lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35,

col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 49: Silverbrook '573 discloses an interface surface printer comprising at the

host device:

        generating a set of print instructions which comprise instructions that define the

content of the document to be printed and at least one pattern instruction which

indicates that a pattern is to be included in the printed documents (i.e. when the printer

receives interaction from the netpage pen to edit a document to be printed, the printer

sends the request to the server. The server, considered as the host device, has an

application stored on the server. The printer sends the server the document, which

defines the changes that occurred to the document and the overall page description of

the document. The page description is sent to a relevant server for interpretation and

then the document is further processed before being sent back to the printer; see figs.

1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35,

col. 7, lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43), the instructions being

provided in a language that can be interpreted by a printer (i.e. the server

communicates to the printer in a language that the printer can interpret and understand; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43);

sending the set of print instructions to a printer connected to the host device (i.e. the servers used in the system send print instructions to the printer connected to the netpage network. The servers are considered to be host devices; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43); and

at the printer processing the print instructions to create the document to be printed including a pattern identified by the at least one pattern instruction (i.e. once the printer receives the print instructions from a respective server, the printer creates a netpage with tag data printed with the visible content. Tags, analogous to the patterns, are identified by the print instructions, which include instructions for both the graphic data and the coded data; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 50: Silverbrook '573 discloses an interface surface printer comprising:

a printing application stored on a host device which is arranged to receive a file defining the content of the document and to generate a set of print instructions which comprise instructions that define the content of the document to be printed and at least one pattern instruction which indicates that a pattern is to be included in the printed

documents (i.e. when the printer receives interaction from the netpage pen to edit a

document to be printed, the printer sends the request to the server. The server,

considered as the host device, has an application stored on the server. The printer

sends the server the document, which defines the changes that occurred to the

document and the overall page description of the document. The page description is

sent to a relevant server for interpretation and then the document is further processed

before being sent back to the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines

1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col.

14, lines 1-43), and

      a printer which includes interpreting means for interpreting the instructions

provided in the set of print instructions to produce the document to be printed including

a pattern identified by the at least one pattern instruction (i.e. once the printer receives

the print instructions from a respective server, the printer creates a netpage with tag

data printed with the visible content. The printer interprets the print instructions and

uses the information to create the netpage document. Tags, analogous to the patterns,

are identified by the print instructions, which include instructions for both the graphic

data and the coded data; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5,

lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67,

and col. 14, lines 1-43).

Re claim 53: Silverbrook '573 discloses an interface surface printer comprising at the

host device:

generating a set of print instructions which comprise instructions that define the content of the document to be printed and a plurality of pattern instructions which each indicate the location of at least one position identification marking in the document (i.e. when the printer receives interaction from the netpage pen to edit a document to be printed, the printer sends the request to the server. The server, considered as the host device, has an application stored on the server. The printer sends the server the document, which defines the changes that occurred to the document and the overall page description of the document. The page description is sent to a relevant server for interpretation and then the document is further processed before being sent back to the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43),

the instructions being provided in a language that can be interpreted by a printer (i.e. the server communicates to the printer in a language that the printer can interpret and understand; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43);

sending the set of print instructions to a printer connected to the host device (i.e. the servers used in the system send print instructions to the printer connected to the netpage network. The servers are considered to be host devices; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43); and

at the printer processing the print instructions to produce a bitmap image of the document to be printed including a pattern which includes a plurality of position markings provided at the locations indicated by the pattern instructions included in the set of print instructions (i.e. in the instructions to print a document are both the coded data and the graphic data instructions. Once the instructions are at the printer, the RIP at the printer creates bitmap information of both the graphic image data and the coded data, or tag information. The tag information can include a plurality of tags provided at various locations within a document that was indicated by the document and page instances in the print instructions; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 54: Silverbrook '573 discloses an interface surface printer comprising:

a printing application stored on a host device which is arranged to receive a file defining the content of the document and to generate a set of print instructions which comprise instructions that define the content of the document to be printed and a plurality of pattern instructions which each indicate the location of at least one position identification marking in the document (i.e. when the printer receives interaction from the netpage pen to edit a document to be printed, the printer sends the request to the server. The server, considered as the host device, has an application stored on the server. The printer sends the server the document, which defines the changes that occurred to the document and the overall page description of the document. The page

description is sent to a relevant server for interpretation and then the document is

further processed before being sent back to the printer. Also, the instructions indicating

the tags to be in the document can have at least one marking in the document for each

tag represented in the print instructions; see figs. 1-4; see col. 1, lines 55-67, col. 2,

lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35

and col. 14, lines 1-43),

the instructions being provided in a language that can be interpreted by a printer

(i.e. the server communicates to the printer in a language that the printer can interpret

and understand; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67

and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col.

14, lines 1-43); and

a printer which includes interpreting means for interpreting each of the pattern

instructions provided in the set of print instructions to produce a bitmap image of a

position identification marking to be printed at a location indicated by the pattern

instruction, the pattern instructions being independent of the resolution of the printer (i.e.

once the printer receives the print instructions from a respective server, the printer

creates a netpage with tag data printed with the visible content. The printer interprets

the print instructions and uses the information to create the netpage document. Tags,

analogous to the patterns, are identified by the print instructions, which include

instructions for both the graphic data and the coded data. In the instructions to print a

document are both the coded data and the graphic data instructions. Once the

instructions are at the printer, the RIP at the printer creates bitmap information of both

the graphic image data and the coded data, or tag information. The tag information can

include a plurality of tags provided at various locations within a document that was

indicated by the document and page instances in the print instructions. Since the tag

instructions do not include specifications on resolution and the printer performs the

proper tag reproduction at a set resolution, the resolution of the printer is independent of

the print instructions; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines

1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 9, lines 1-67, col. 13,

lines 1-67, and col. 14, lines 1-43).

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 1-8, 10, 11, 13, 14, 16-18, 20-25 and 29 are rejected under 35 U.S.C.

103(a) as being unpatentable over Silverbrook '573 in view of Wiebe '089 (US Pub No

2002/0159089).

Re claim 1: Silverbrook '573 discloses an interface surface printer comprising:

        providing to a printer a set of print instructions which define the content of a

document (i.e. in the system of Silverbrook '573, a netpage printer is able to receive a

page description, or print instructions, describing the content of a document. The

content in Silverbrook '573 refers to the physical graphics and images that can be seen

on the sheet when printed. This printed page is referred to as a netpage; see col. 1,

lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67

and col. 8, lines 1-35);

generating at the printer a pattern using pattern information that is from the print

instructions (i.e. the netpage printer is used to print, or generate, a pattern using coded

data information and is associated with the print instructions for the visible document

information. Accompanied with the coded data is a page ID which represents the

location of the document the tag with the page ID is located. Since the print instructions

are separate from the coded data encoded in a tag, the page description and the

encoded data are both independent from one another; see fig. 4; see col. 1, lines 55-67,

col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67 and col. 8,

lines 1-35); and

printing a document that comprises both the content and the pattern (i.e. when

the netpage is printed on the system, the document has a visible layout consisting of

text, graphics or images and invisible coded data, considered as the pattern, in the

netpage; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and

col. 6, lines 1-35, col. 7, lines 1-67 and col. 8, lines 1-35).

However, Silverbrook '573 fails to teach pattern information that is independent

from the print instructions.

However, this is well known in the art as evidenced by Wiebe '089. Wiebe '089

discloses pattern information that is independent from the print instructions (i.e. the

system of Wiebe is similar to the system of Silverbrook since both are involved with

printing sheets of paper with position coding information. However, the reference of

Wiebe discloses the feature of printing out other information, such as images and text,

independently of the position-coding pattern according to the arrangement for printing

shown in figure 5; see figs. 2-5; paragraphs [0053]-[0056]).

Therefore, in view of Wiebe '089, it would have been obvious to one of ordinary

skill at the time the invention was made to have the feature of pattern information that is

independent from the print instructions, incorporated in the device of Silverbrook '573, in

order to generate graphical information corresponding to a position-coding pattern and

being superimposed on visual information (as stated in Wiebe '089 paragraph [0036]).

Re claim 2: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 1 in which the print instructions include

at least one pattern instruction indicating that a pattern is to be added by the printer to

the document (i.e. the netpage printer in Silverbrook '573 can receive the coded data

layout to be printed on a document. This is considered to be a pattern instruction since

the computer system in Silverbrook '573 can send information indicating that coded data

of a certain layout should be added to a document by the netpage printer; see figs. 1-4;

see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7,

lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43) and the printer adds a pattern to the

printed document in response to the at least one pattern instruction (i.e. once the

netpage printer receives document data and tag ID information associated with the

document data, the netpage printer interprets the tag and prints the coded data

associated with the document data; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-

30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col.

14, lines 1-43).

Re claim 3: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 2 in which the pattern instruction

comprises a pattern ID and in which the step of generating the pattern at the printer

comprises adding a portion of pattern identified by the ID (i.e. when a computer system,

or server, sends a request for a document to be printed on the netpage printer, the page

description that consists of both graphic image data and coded data is sent to the

printer. The coded data sent to the printer comprises a page ID location within the

actual document. This page ID location tag is used to tell the printer to print the tag

content in that specific region or location. This tag can appear either on the whole

surface of the page or on a subregion of the page. If the tag appears on a subregion on

a page, the printer adds the coded data on that portion of the document and this

performs the feature of adding a portion of pattern identified by the ID, since this is

identified by the tag with a page ID position; see figs. 1-4; see col. 1, lines 55-67, col. 2,

lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35

and col. 14, lines 1-43).

Re claim 4: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 2 in which the pattern instruction

comprises an address or an instruction corresponding to an address (i.e. included in the

netpage page ID (50) is a network address of the netpage page server that handles the

corresponding page instance, or digital printed data that consists of the coded data; see

figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-

35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14, lines 1-43), and

the step of generating the pattern comprises causing the printer to request an

appropriate pattern from a server having a network address identified by the pattern

instruction (i.e. when the printer prints out netpage documents, the printer requests the

information regarding the coded data from the netpage application and publication

servers (13 and 14). The netpage publication server communicates with the printer the

information regarding the visible layout of information and the handling of the netpage

page ID. Here, the printer goes to the server through the IP address, using the DNS

system, and requests the server to determine the page instance in the current

document. The page instance represents the coded data in the document that interacts

with the pen used in the system; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30,

col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines

1-67 and col. 14, lines 1-43).

Re claim 5: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed above.

Silverbrook '573 discloses the method of claim 1 in which the pattern is allocated to the document at the printer after initiating the transmission of the document instructions to the printer (i.e. when the netpage printer sends information regarding the interaction between the netpage and the netpage pen, the printer receives information that is transmitted from a netpage application server and the printer performs printing. The information sent from the server is print instructions regarding a document and coded data related to that document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14, lines 1-43).

Re claim 6: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed above.

Silverbrook '573 discloses the method of claim 1 in which a pattern is allocated to the document prior to sending the document to the printer and in which the instructions sent to the printer include a plurality of pattern instructions (i.e. while the netpage is still at the server, the netpage is made up of a plurality of document and page instances. The page instances represent the invisible coded data and the tags associated with the data. This information is developed before it is transmitted to the netpage printer for printing. The document sent to the printer consists of a plurality of instances that represent the coded data, to be printed on the documents once the documents reach

the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and

col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14,

lines 1-43),

each one indicating the location of a pattern marking on the document (i.e. within

the netpage, there are a plurality of invisible tags that represent the location of coded

data in the document. The coded data is invisible marking that interacts with the

netpage pen; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67

and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14,

lines 1-43) and

in which the printer generates the pattern to be printed by creating the

appropriate position indication marking for each location (i.e. the netpage printer

recognizes the visible graphic data and the tags associated with the coded data and

prints both on the document of interest. The invisible tags have page ID position

information representing the tag's position on the page. Since the tags can be all over a

page or in certain subregions of the page, the feature of creating the position indication

marking for each location is performed; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines

1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13,

lines 1-67 and col. 14, lines 1-43).

Re claim 7: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 6 in which the printer includes a look-up

table or library in a memory which stores instructions which tell the printer how to

produce a position identification marking for use in creating the pattern (i.e. in

Silverbrook '573, alternatively, the printer can include a storage medium that stores

different coded data layouts to be used when printing a document that includes coded

data. The tags used are for identifying a region of the page it is printed on. With the

printer capable of having a storage medium with coded data layouts telling the printer

how to print certain layouts of coded data, which consists of position identifying

markings for use in the coded data, the above feature is performed; see figs. 1-4; see

col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines

1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14, lines 1-43).

Re claim 8: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 6 in which the printer includes a raster

image processor which receives the print instruction set (i.e. when the page descriptions

are received by the netpage printer, the page descriptions are rasterized by the RIP;

see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines

1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14, lines 1-43) and

        is adapted to retrieve a bitmap corresponding to each position indication marking

identified by a pattern instruction contained in the print instructions from the library (i.e.

once the netpage is rasterized, the coded data along with the regular data are both

developed into a bitmap. Conventionally, the process of rasterization is the

development of the data being RIPed becoming bitmap data. The tags are rasterized

and stored in the page image. The tags are the position identification markings that are

identified as the coded data that are apart of the page description, which includes page

instance instructions. The coded data layout is capable of being from the storage

medium in the printer; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5,

lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67,

col. 14, lines 1-43, col. 47, lines, 55-67 and col. 48, lines 1-23).

Re claim 10: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 1 in which the printer includes a look-up

table in a memory which stores a pattern which is sufficient to cover and area larger

than the area of a document to be printed (i.e. in figure 1, it is clear that the tags on the

page can be placed in a manner that is larger than the area of the document that is

printed on. With the server or printer capable or having a storage medium to store

coded data layouts, the feature of having a look-up table in a memory which stores a

pattern is performed; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines

1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and

col. 14, lines 1-43) and in which the pattern instruction identifies the location of a portion

of the stored pattern to be printed on the document (i.e. the page instances sent to the

printer to print out a netpage includes instructions that tell the printer what region to print

the coded data on the document. The coded data used can be the whole of the coded

data to cover the whole document or a portion of the coded data to only cover a portion

of the document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-

67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col.

14, lines 1-43).

Re claim 11: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 1 in which the printer is adapted to

produce a bitmap corresponding to the content and a bitmap corresponding to the

pattern and in which the two bitmaps are combined to produce a bitmap for the

document to be printed (i.e. in the conventional sense, when rasterization is performed,

a bitmap is produced. The RIP in the system rasterizes the graphic or image data and

the RIP also rasterizes the coded data. The coded data is then stored with the page

image data to produce two bitmaps corresponding to one document to be printed; see

figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-

35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, col. 14, lines 1-43, col. 47,

lines, 55-67 and col. 48, lines 1-23).

Re claim 13: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 1 in which the printer is arranged to add

a different pattern to each copy of a document that it prints from a set of print

instructions (i.e. in the system of Silverbrook '573, the same page descriptions can be

shared, but in order to distinguish the pages, a unique page identifier is assigned to

each page. The page ID relates to the bits encoded in the tags printed in the system.

Since the tags contain different page IDs, synonymous with region IDs, then the coded

data contain different information. Thus the coded data on different pages are different

and this performs the above feature; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-

30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13,

lines 1-67, col. 14, lines 1-43).

Re claim 14: Silverbrook '573 discloses an interface surface printer, the apparatus

including

        a printer having an interpreting means arranged to create the pattern to be

printed in response to receipt of a set of print instructions (i.e. when the printer receives

information regarding the image data and the coded data to be printed on the printer,

the printer takes the instructions sent from the server and interprets page description to

print out coded data, considered as the pattern, in response to the received instructions

from the server; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67

and col. 6, lines 1-35, col. 7, lines 1-67 and col. 8, lines 1-35),

        the print instructions defining the content of the document using pattern

information that is from the print instructions (i.e. the netpage printer is used to print, or

generate, a pattern using coded data information and is associated with the print

instructions for the visible document information. Accompanied with the coded data is a

page ID which represents the location of the document the tag with the page ID is

located. Since the print instructions are separate from the coded data encoded in a tag,

the graphic data in the page description and the encoded data are both independent

from one another; see fig. 4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67

and col. 6, lines 1-35, col. 7, lines 1-67 and col. 8, lines 1-35).

      However, Silverbrook '573 fails to teach pattern information that is separate from

the print instructions.

      However, this is well known in the art as evidenced by Wiebe '089. Wiebe '089

discloses pattern information that is separate from the print instructions (i.e. the system

of Wiebe is similar to the system of Silverbrook since both are involved with printing

sheets of paper with position coding information. However, the reference of Wiebe

discloses the feature of printing out other information, such as images and text,

independently of the position-coding pattern according to the arrangement for printing

shown in figure 5; see figs. 2-5; paragraphs [0053]-[0056]).

      Therefore, in view of Wiebe ''089, it would have been obvious to one of ordinary

skill at the time the invention was made to have the feature of pattern information that is

separate from the print instructions, incorporated in the device of Silverbrook '573, in

order to generate graphical information corresponding to a position-coding pattern and

being superimposed on visual information (as stated in Wiebe '089 paragraph [0036]).

Re claim 16: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed
above.

Silverbrook '573 discloses the apparatus of claim 14 in which the print instructions
include at least one pattern instruction indicating that a pattern is to be printed on the
document (i.e. the netpage printer in Silverbrook '573 can receive the coded data layout
to be printed on a document. This is considered to be a pattern instruction since the
computer system in Silverbrook '573 can send information indicating that coded data of
a certain layout should be added to a document by the netpage printer; see figs. 1-4;
see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7,
lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43) and the printer adds a pattern to the
printed document in response to the at least one pattern instruction (i.e. once the
netpage printer receives document data and tag ID information associated with the
document data, the netpage printer interprets the tag and prints the coded data
associated with the document data; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-
30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col.
14, lines 1-43).

Re claim 17: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed
above.

Silverbrook '573 discloses the apparatus of claim 14, further comprising:

        a printing application stored on a host device which is arranged to receive a file
defining the content of the document (i.e. when the printer receives interaction from the

netpage pen to edit a document to be printed, the printer sends the request to the

server. The server, considered as the host device, has an application stored on the

server. The printer sends the server the document, which defines the changes that

occurred to the document and the overall page description of the document. The page

description is sent to a relevant server for interpretation and then the document is

further processed before being sent back to the printer; see figs. 1-4; see col. 1, lines

55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8,

lines 1-35 and col. 14, lines 1-43) and

   to generate a set of print instructions which comprise instructions that define the

content of the document to be printed (i.e. the server is used to generate print

instructions for the printer to print out a document with page description sent to the

printer. The page description defines the content of the document to be printed; see

figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-

35, col. 7, lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43) and

   at least one pattern instruction which indicates that a pattern is to be included in

the printed documents (i.e. when the page description is sent to the printer, the printer

translates the page description and prints out a document that has graphic image data

that is visible and tags that are coded data, considered as the pattern. There can be

multiple page ID location tags in the page description that describes the tags in the

document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and

col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35 and col. 14, lines 1-43).

Re claim 18: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the system of claim 17 in which the interpreting means

comprises a raster image processor and in which the print instructions produced by the

host device are in a page description and/or print job language (i.e. the printer has a

RIP and the print instructions sent to the printer that are produced by a server,

considered as the host device, are in a page description; see figs. 1-4; see col. 1, lines

55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8,

lines 1-35 and col. 14, lines 1-43).

Re claim 20: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the system of claim 16 in which the pattern instruction

comprises a network address and in which the printer includes a network connection to

a processor identified by the network address (i.e. using the DNS method, the printer is

able to connect to the netpage page server that corresponds to the page instance that is

related to a netpage document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30,

col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines

1-67, and col. 14, lines 1-43),

　　　　pattern request means for requesting pattern from the processor (i.e. when the

printer recognizes action of the netpage pen, the printer may send a signal to the

appropriate server to obtain the representation of the document and have it sent to the

printer. The printer will be sent both the document visible data and the coded data.

When trying to resolve the page instance, a DNS procedure is performed to realize the

page instance in association to the page ID, which is embedded in the document

through tags; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67

and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col.

14, lines 1-43), and

      pattern receiving means for receiving from the processor an appropriate pattern

in response to the pattern request (i.e. the printer is able to receive the appropriate

pattern from the transmitting server in order to print out the receiving document with

both visible data and coded data. In response to the printer's request to resolve the

page instance in the document, the server sends the appropriate information so that this

page ID tag can be realized in the document; see figs. 1-4; see col. 1, lines 55-67, col.

2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35,

col. 13, lines 1-67, and col. 14, lines 1-43).

Re claim 21: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the system of claim 20 in which the pattern requesting and

receiving means comprises program instructions stored in a memory of the processor

which are executed whenever the RIP processes a pattern instruction in a print

instruction set (i.e. in the printer resides both a RIP and a controller for the whole

system. The flash memory (658) shown in fig. 63, is used to store the software for the

commands for both the processor and the RIPs (DSPs) used in the system of the

netpage printer; see col. 46, lines 53-67, col. 47, lines 1-67 and col. 48, lines 1-22).

Re claim 22: Silverbrook '573 discloses an interface surface printer which includes a

pattern of position identification markings (i.e. the tags within the document printed by

the netpage printer is used to have pattern of tags that have coded data in the tags

identifying the positions in the different regions of the document; see figs. 1-4; see col.

1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-

67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43) which includes:

        means for receiving a print file containing a set of print instructions for the printing

of a document (i.e. the netpage printer is configured to receive a file representing the

page description of a file to be printed. The page descriptions contain a set of print

instructions to be interpreted by the printer for printing out the incoming document from

a server in the system; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5,

lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67,

and col. 14, lines 1-43), and

        means for creating the required pattern in response to at least one pattern

instruction contained in the print file using pattern information that is obtained from the

print file (i.e. the page description consists of the page description and the page

instances that represent the coded data. These are both transmitted to the respective

printer, but are independent of each other since the layout of the visible information can

be the same, but the arrangement of the coded data can be different from a previous

document representation of the same document. The printer creates a pattern due to the received pattern instruction from the server, which also transmits the visible document information for the visible layout of the document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

However, Silverbrook '573 fails to teach pattern information that is obtained independently from the print file.

However, this is well known in the art as evidenced by Wiebe '089. Wiebe '089 discloses pattern information that is obtained independently from the print file (i.e. the system of Wiebe is similar to the system of Silverbrook since both are involved with printing sheets of paper with position coding information. However, the reference of Wiebe discloses the feature of printing out other information, such as images and text, independently of the position-coding pattern according to the arrangement for printing shown in figure 5; see figs. 2-5; paragraphs [0053]-[0056]).

Therefore, in view of Wiebe ''089, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of pattern information that is obtained independently from the print file, incorporated in the device of Silverbrook '573, in order to generate graphical information corresponding to a position-coding pattern and being superimposed on visual information (as stated in Wiebe '089 paragraph [0036]).

Re claim 23: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the printer of claim 22 in which the print instructions include

at least one print instruction that comprises a pattern ID (i.e. when a computer system,

or server, sends a request for a document to be printed on the netpage printer, the page

description that consists of both graphic image data and coded data is sent to the

printer. The coded data sent to the printer comprises a page ID location within the

actual document. This page ID location tag is used to tell the printer to print the tag

content in that specific region or location. This tag can appear either on the whole

surface of the page or on a subregion of the page. If the tag appears on a subregion on

a page, the printer adds the coded data on that portion of the document and this

performs the feature of adding a portion of pattern identified by the ID, since this is

identified by the tag with a page ID position; see figs. 1-4; see col. 1, lines 55-67, col. 2,

lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35

and col. 14, lines 1-43).

Re claim 24: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the printer of claim 22 in which the pattern instruction

comprises an address (i.e. using the DNS method, the printer can go to the address of

the server to resolve, or to design, the page instance that is associated with the page ID

represented in a tag; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines

1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and

col. 14, lines 1-43), the method comprising at the printer requesting an appropriate

pattern from a server identified by the address (i.e. when using the DNS method of

resolving a page instance, which represents coded data, the printer communicates with

a certain address of a server that is able to help resolve the page instance used in a

netpage document. If the printer realizes an action by a netpage printer, the printer

transmits the action information to the server and requests a print out of the netpage if

any editing occurred, which includes requesting the respective coded data that

accompanies the netpage document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines

1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13,

lines 1-67, and col. 14, lines 1-43), and

adding the pattern received in response to the request to the document bitmap

(i.e. once the coded data information is received, the document data is bitmapped and

the coded data is bitmapped after rasterization of both. Then the two types of data are

combined together, or the coded data bitmap is added to the visible document data, to

form one netpage; col. 47, lines 1-67 and col. 48, lines 1-22).

Re claim 25: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the printer of claim 22 in which the print instructions include a

plurality of pattern instructions which each indicate the location of at least one position

identification marking in the document (i.e. in the system, a page ID represented by a

tag can have one tag representing a subregion, or more than one tag across the whole document that indicates multiple locations because of the page instance instructions included in the command to print a document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43),

the printer generating the pattern marking to be provided at the indicated location of the content of the print instructions (i.e. once the printer receives instructions regarding the visible document information and the coded data information, the printer produces a print out of a netpage with both types of data represented in the netpage; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43).

However, Silverbrook '573 fails to teach pattern marking to be provided at the indicated location independent of the content of the print instructions.

However, this is well known in the art as evidenced by Wiebe '089. Wiebe '089 discloses pattern marking to be provided at the indicated location independent of the content of the print instructions (i.e. the system of Wiebe is similar to the system of Silverbrook since both are involved with printing sheets of paper with position coding information. However, the reference of Wiebe discloses the feature of printing out other information, such as images and text, independently of the position-coding pattern according to the arrangement for printing shown in figure 5; see figs. 2-5; paragraphs [0053]-[0056]).

Therefore, in view of Wiebe "089, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of pattern marking to be provided at the indicated location independent of the content of the print instructions, incorporated in the device of Silverbrook '573, in order to generate graphical information corresponding to a position-coding pattern and being superimposed on visual information (as stated in Wiebe '089 paragraph [0036]).

Re claim 29: The teachings of Silverbrook '573 are disclosed above.
Silverbrook '573 discloses the computer readable medium of claim 26 in which the pattern instructions include a plurality of pattern instructions which each indicate the location of at least one position identification marking in the document with indicating the appearance of the marking at each location (i.e. when the server sends information to the printer for a document to be printed, the instructions for printing includes an instruction that indicates the location of one or more tags, considered as position identification markings, in the document. This is performed in the instructions while not indicating the appearance of the tag at a location in the visible and physical document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14, lines 1-43), the instructions being provided in a language that can be interpreted by a printer (i.e. the server communicates to the printer in a language that the printer can interpret and understand; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and

col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67, and col. 14,

lines 1-43).

However, Silverbrook '573 fails to teach indicate the location of at least one

position identification marking in the document without indicating the appearance of the

marking at each location.

However, this is well known in the art as evidenced by Wiebe '089. Wiebe '089

discloses indicate the location of at least one position identification marking in the

document without indicating the appearance of the marking at each location (i.e. the

system of Wiebe is similar to the system of Silverbrook since both are involved with

printing sheets of paper with position coding information. However, the reference of

Wiebe discloses the feature of printing out other information, such as images and text,

independently of the position-coding pattern according to the arrangement for printing

shown in figure 5. With the information of the position coding being independent of the

other information being printed, the marking that appears at the position coding location

is not indicated by the position coding information, but by the information indicating the

page description of the text or images at that location; see figs. 2-5; paragraphs [0053]-

[0056]).

Therefore, in view of Wiebe ''089, it would have been obvious to one of ordinary

skill at the time the invention was made to have the feature of indicate the location of at

least one position identification marking in the document without indicating the

appearance of the marking at each location, incorporated in the device of Silverbrook

'573, in order to generate graphical information corresponding to a position-coding

pattern and being superimposed on visual information (as stated in Wiebe '089

paragraph [0036]).

16.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Silverbrook '573, as modified by the features of Wiebe '089, as applied to claim 1 and 6,

and further in view of Wiebe '688 (USP 6586688).

Re claim 9: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the method of claim 6 in which the pattern comprises multiple

instances of a single position identification marking provided at locations of a virtual grid

across a portion of the document (i.e. in Silverbrook '573, looking at figure 6, a virtual

grid is shown as an irregular triangular grid. Looking at figure 5, the tags that represent

the single position identification markings are across the grid, which is also across a

portion of the document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5,

lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67

and col. 14, lines 1-43), and in which the pattern instructions identify the position of

each marking relative to the grid (i.e. the page and document instances included with

the page description have the instructions for the printer of identifying the positions of

each tag on the triangular grid shown in figure 6, which is a grid on a document; see

figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-

35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col. 14, lines 1-43).

However, Silverbrook '573 fails to teach a single position identification marking provided at locations offset from the intersections of a virtual grid across a portion of the document.

However, this is well known in the art as evidenced by Wiebe '688. Wiebe '688 discloses a single position identification marking provided at locations offset from the intersections of a virtual grid across a portion of the document (i.e. in Wiebe '688, shown in figure 2 are single position coding markings in a pattern that are offset in a virtual grid that is across a document; see figs. 1 and 2; col. 7, lines 36-67 and col. 2, lines 1-50)

Therefore, in view of Wiebe '688, it would have been obvious to one of ordinary skill at the time the invention was made to have a single position identification marking provided at locations offset from the intersections of a virtual grid across a portion of the document in order to markings located in respective quadrants defined by the intersections of the raster lines (as stated in Wiebe '688 col. 13, lines 14-30).

17.   Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook '573, as modified by the features of Wiebe '089, as applied to claims 1 and 14, and further in view of Rijavec '596 (US Pub No 2004/0095596).

Re claim 12: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed above.

Silverbrook '573 discloses the method of claim 1 in which the set of instructions

generated at the host device comprise job language instructions indicating that a pattern

is to be included and/or instructions in a page description language defining the content

(i.e. in the system, the server, considered as the host device, is used to send print job

instructions to the printer that indicates that the printer should print image data with a

specific type of coded data. Since the server may assign this job to the printer, the

language spoken to the printer may be considered as a job language, since it instructs

the printer about a print job and all apparatuses that communicate with a printer

communicate in some language. Also shown in figure 4, the page description

communicated to the printer by the server defines the coded data, or content, to be

printed in the document; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5,

lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67,

and col. 14, lines 1-43).

However, Silverbrook '573 fails to teach printer job language (PJL).

However, this is well known in the art as evidenced by Rijavec '596. Rijavec '596

discloses printer job language (PJL) (i.e. in Rijavec '596, a job ticket, which describes

the data perform the printing of a print job, can be expressed in a Printer Job Language.

This can be sent from a server to a printer; see paragraph [0018]).

Therefore, in view of Rijavec '596, it would have been obvious to one of ordinary

skill at the time the invention was made to have a printer job language (PJL) in order to

have a job ticket expressed in a particular data stream (as stated in Rijavec '596).

Re claim 19: The teachings of Silverbrook '573 in view of Wiebe '089 are disclosed

above.

Silverbrook '573 discloses the system of claim 16 in which the pattern instruction in the

print instruction set comprises a command (i.e. the page description that includes the

tag, which is considered the pattern instruction, is instructed by the information in the

tag to print a specific tag with the overall image; see figs. 1-4; see col. 1, lines 55-67,

col. 2, lines 1-30, col. 5, lines 1-67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines

1-35, col. 13, lines 1-67 and col. 14, lines 1-43) and in which the RIP is provided with a

function which is called by the command (i.e. the command that is sent to the printer is

processed immediately by the RIP on the printer. The page description that is given to

the printer and the page description is called by the command to be translated by the

RIP in the device; see figs. 1-4; see col. 1, lines 55-67, col. 2, lines 1-30, col. 5, lines 1-

67 and col. 6, lines 1-35, col. 7, lines 1-67, col. 8, lines 1-35, col. 13, lines 1-67 and col.

14, lines 1-43).

      However, Silverbrook '573 fails to teach a PJL command.

      However, this is well known in the art as evidenced by Rijavec '596. Rijavec '596

discloses a PJL command (i.e. since the print job language is used to given directions to

the printer as to how a document is to be presented, these directions can be considered

as commands to the printer. Also, since the server and receiver can be synchronized at

a command level, using the previously mentioned languages, a PJL command is

performed; see paragraph [0018]).

Therefore, in view of Rijavec '596, it would have been obvious to one of ordinary skill at the time the invention was made to have a PJL command in order to have controls transmitted that specify how data is to be presented (as stated in Rijavec '596 paragraph [0018]).

Conclusion

18.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19.   Wiebe (US Pub No 2003/0016386) discloses the feature of having a printer than is able to print both an embedded position coding with other information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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